Mollugo floriana (Robins.) Howell ssp. **santacruziana** (Christoph.) Eliasson, comb. nov. *M. snodgrassii* Robins. var. *santacruciana* Christoph., Nyt Mag. Naturvidensk. 70:75. 1931.

Known only from the type collection, taken at "Academy Bay," Isla Santa Cruz (*Rorud 1230*).

Anredera **ramosa** (Moq.) Eliasson, comb. nov. *Tandonia ramosa* Moq., in D.C. Prodr. 13:227. 1849. *Boussingaultia ramosa* Hemsley, Biol. Centr.-Amer. 3:27. 1882. *B. baselloides* in Galápagos literature, not H.B.K., 1825.

University of Göteborg, Sweden

A NEW SPECIES OF POLYGONUM (POLYGONACEAE)

Jerrold Coolidge

During the course of study in preparing a revision Section *Avicularia* of the genus *Polygonum,* (Coolidge, 1964) a group of specimens were found which possessed charateristics distinct enough to warrant description as a new species.

Polygonum triandrous Coolidge, sp. nov. Herba annualis; erecta; 1 vel 4 dm longa; folia lineari-lanceolata vel linearia, 2 vel 4 cm longa; inflorenscentia axillaris; 2 vel 3 flores in axilla foliorum; flores erectae, 2 vel 3.5 cm longae, virides marfinibus roseis vel albis; stamina 3; achenium ovoideum, 3 mm longum, atrum, glabrum.

Annual; erect, glabrous except glaucescent or scurfy at nodes; stem 1 to 4 dm long, terete, branched from the base or throughout; leaves linear-lanceolate or linear, 2 to 4 cm long, 3 to 5 mm wide, revolute or flat, light green, glaucous on upper surface, acute, midvein prominent, articulation to ocrea conspicuous; ocrea 2-parted when young, lacerate with age, silvery with reddish-brown base, 4 to 5 mm long; pedicels stout, 2 mm long; inflorescence axillary, 2 to 3 flowers in the axils throughout the length of stem; articulated with the flower at the flower base, flower and fruit erect, 3 to 3.5 mm long, green with pink or white margins; calyx segments ovate, obtuse, 5 -parted to near the base; stamens 3, 1.5 mm long, anthers white, filaments dilated gradually; style 0.1 to 0.2 mm long, 3-cleft to near the base; achene ovoid, 3 mm long, black, smooth and shining (fig. 1).

Type. Idaho: Blaine Co., along trail to Hyndman Peak, *W. H. Baker 11005* (ID-holotype, ARIZ, MONTU, NY, OSC, RM, UC, WS, WTU).

Numerous collections of *P. triandrous* from herbaria throughout the western states have been examined. In most cases, it has been identified as *P. sawatchense* Small and does appear to be most closely allied with

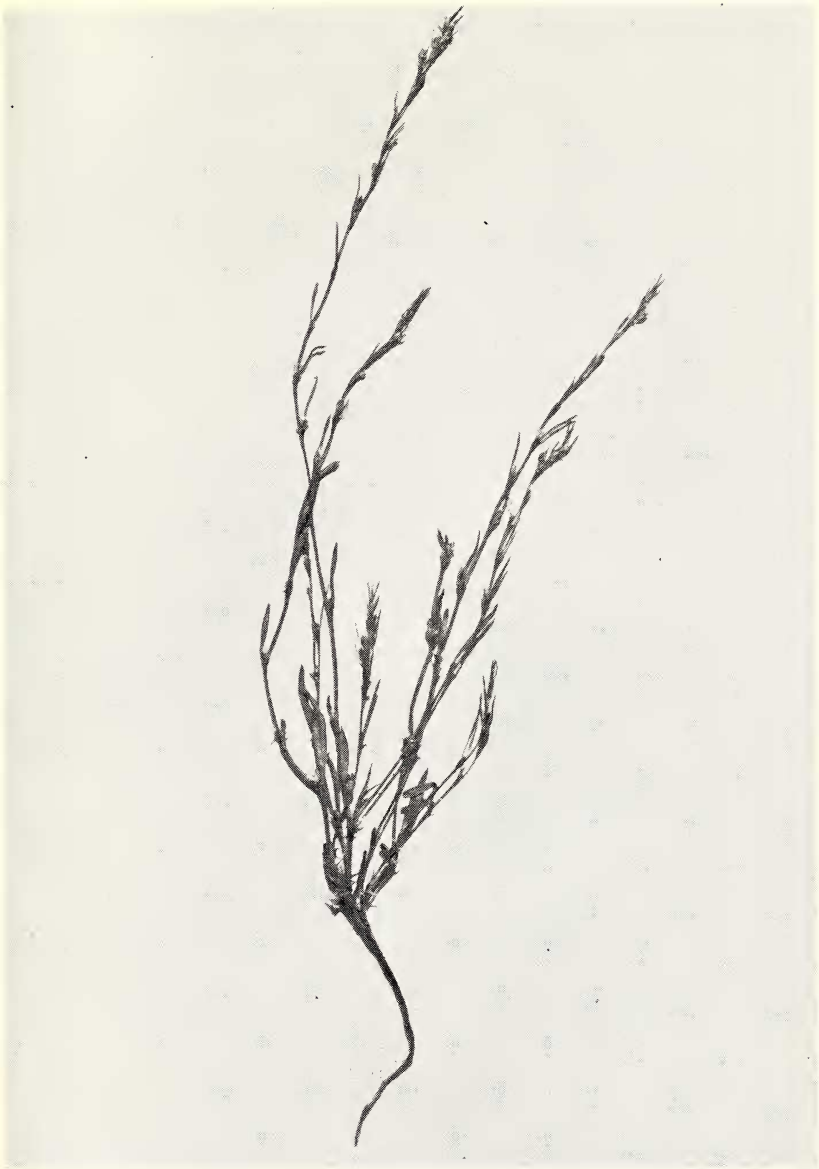

FIG. 1. Photograph of type of *Polygonum triandrous*.

this species. It differs in having narrower leaves below, the upper leaves of a more bracteate nature and the most apparent difference, the presence of only three stamens. *Polygonum triandrous* may be distinguished from other related species by the following key:

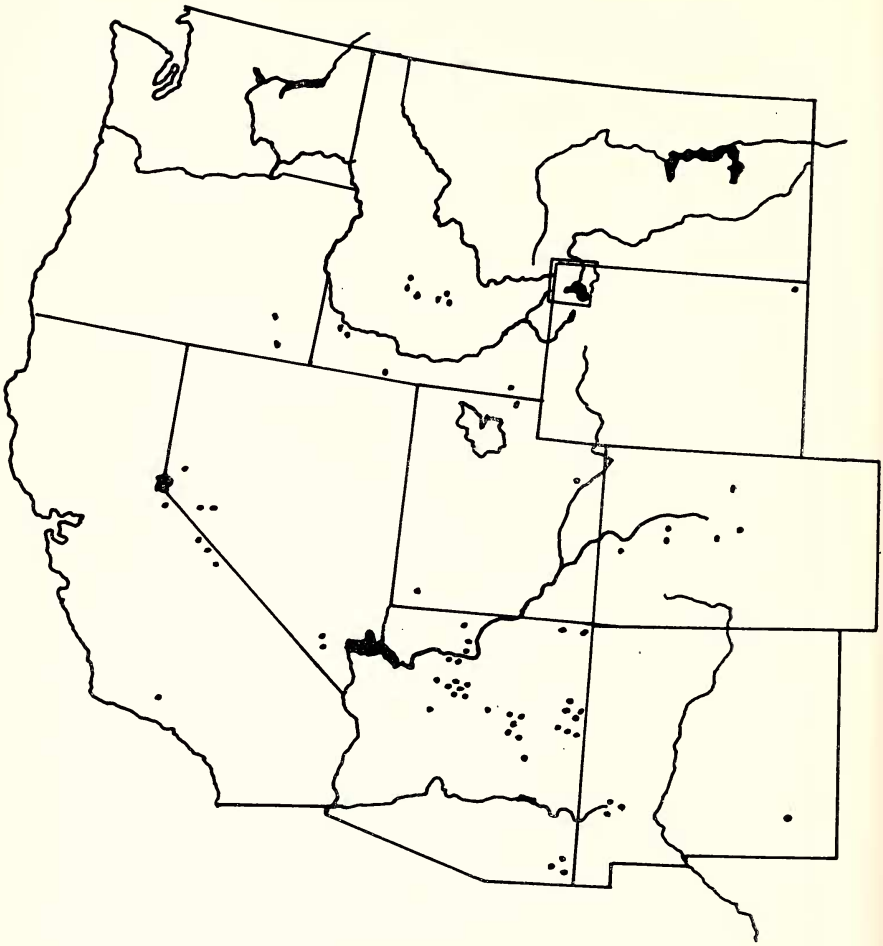

FIG. 2. Distribution of *Polygonum triandrous* in western North America.

Leaf size somewhat reduced upward, lanceolate, liner
Leaves linear, linear-lanceolate
Stamens 3 . . . . . *P. triandrous* Coolidge
Stamens 8 . . . . . *P. tenue* Michx.
Leaves lanceolate . . . . . *P. sawatchense* Small
Leaf size about the same throughout, ovate, obovate
Flowers few in axils, remote . . . . . *P. minimum* Wats.
Flowers several in axils, congested . . . *P. cascadense* Baker

The known range includes areas within the Colorado Plateau, New Mexican Highlands, Rocgy Mountains, Columbia Plateau, Great Basin and the Sierra Nevada (fig. 2). The distributional pattern of this species

would indicate a probable origin in central Arizona, radiating into all western states except perhaps, Washington and Montana.

Department of Botany, University of Idaho, Moscow

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Coolidge, J. O. 1964. A revision of the genus Polygonum section Avicularia in the western United States. M. A. Thesis (unpublished), University of Idaho.

CHROMOSOME NUMBERS AND A PROPOSAL FOR CLASSIFICATION IN SISYRINCHIUM (IRIDACEAE)

Theodore Mosquin

Introduction

The classification of North American *Sisyrinchium* has been highly unsatisfactory for many decades. For example, it is difficult with the aid of standard floras such as Abrams (1923), Fernald (1950), Gleason (1952), and Munz (1959) to identify many collections of this genus from regions covered by these floras. One reason for this difficulty is that plants of this genus are notoriously lacking in qualitative differences such as are necessary to distinguish species. A second reason is that regional floras which deal with different or confluent parts of the continent have continued to follow traditional and local classifications. The existing disagreements concerning the occurence and the nature of phenotypic discontinuities illustrates the need for a reappraisal of variability not only by the use of techniques of modern taxonomy but by examination of variation on a continent-wide basis. The present paper brings together some field, herbarium, published, and laboratory observations on correlations between morphology, chromosome numbers, ecology, and geography of plants of this genus from populations throughout much of the North American distribution area.

The *Sisyrinchium* populations considered in this paper comprise the widely distributed, small-flowered perennials in which the anther filaments are united in a tube. Excluded are the annuals of Texas and adjacent regions which have been discussed recently by Shinners (1962). Also excluded are the large-flowered perennials of Mexico and the Caribbean Islands as well as the large-flowered and very distinctive *S. douglasii* Dietr. of western North America. So defined, the plants commented on in this paper range from Greenland to Alaska and south to Florida, Texas, and California and may extend into Mexico.

Directly relevant to their classification and an outstanding feature of the *Sisyrinchium* populations considered here is that a high degree of self-pollination appears to be a characteristic feature (Knuth, 1909; Ingram, 1967; Table 1). Table 1 shows the results of an experiment designed to determine the potential for automatic self-pollination in a tetraploid poupulation growing under natural conditions near Banff,